

REMARKS

Summary of Changes Made

In previous amendments, claims 1, 3 and 5-8, and 10 were amended, claims 2, 4, and 9 were canceled, and new claims 11-12 were added. Presently, claims 1 and 3 are amended substantively, and claims 10-12 are canceled. Accordingly, claims 1, 3 and 5-8 (6 claims) remain pending in the application. No new matter is added by this amendment.

Claim Rejections - 35 U.S.C. §103(a)(Mellul)

In the prior Office Action, the Examiner rejected claims 1, 3, and 5-8 under 35 U.S.C. 103(a) as obvious in view of Mellul, U.S. Pat. No. 5,612,021 ("Mellul"). The Examiner's reasoning for the rejections is identical to that in the previous Office Action.

Essentially, the Examiner contends that Mellul teaches a cosmetic composition that includes 0.1-50% wax, 0.5-15% of a resin and 0.5-30% of a hollow organic powder.

The Examiner has apparently again found largely unpersuasive the claim amendments requiring the powder to be hollow and the extensive argumentation outlining the vast differences between fullerenes and not otherwise identified hollow powders, which was presented therewith in Applicants' previous Amendments. Applicants explicitly acknowledge that the prior rejection for anticipation has been reduced to a rejection for obviousness over the same Mellul reference.

The Examiner will note that claim 1 has been amended again to recite that the cosmetic composition includes 5 to 25% by mass of a wax, 2 to 20% by mass of a resin and 0.1 to 10% by mass of a hollow resin powder. Support for such limitations are found in the specification as originally filed in paragraphs 13, 14, and 23, respectively. As noted in Tables 2 to 4, unexpectedly superior results are obtained when the wax content of the composition is in the range of 5 to 25% by mass, when the resin content is in the range of 2 to 20% by mass, and when the content of hollow resin powder is in the range of 0.1 to 10% by mass. Values outside those ranges gave poor results.

Claim 3 is amended to recite that the ratio of the combined volume of wax plus resin to the volume of the hollow resin powder is 1:5 to 1:0.05. The limitation is found in paragraph 24 of the specification. Unexpectedly superior results are achieved by the cosmetic having the wax, resin, and hollow resin powders in this volume range, as noted in tables 6 and 7. The language

“said ratio represented by $(a+b) \div c$ ” does not represent new matter, but is a clearer way to express the claimed ratio.

In previous amendments, Applicants presented detailed arguments distinguishing the fullerenes of Mellul from the instantly claimed compositions, to which the Examiner is again referred. The Examiner did not address such comments, which are largely repeated herein for the convenience of the Examiner.

Mellul fails to disclose all of the limitations of claim 1, i.e., an eyelash cosmetic that includes all three of the elements presently claimed in claim 1 in the amounts recited in claim 1, with the limitation that the hollow particles be made out of resins (as opposed to fullerenes, as disclosed in Mellul), having a true specific gravity (i.e., density) of 0.02 to 0.65. Applicants note that Mellul fails to teach a mascara (i.e., eyelash cosmetic) that includes a resin blended therein. The hollow particles (fullerenes) of Mellul cannot reasonably be equated to the instantly claimed hollow resin powders. As is known in the art, fullerenes are spherical or near-spherical allotropic particles of carbon atoms bonded in certain configurations. The most common fullerene is C60, a truncated icosahedron, having a particle diameter of about 1 (one) nanometer. Larger fullerenes such as C72 and C84 are marginally larger, on the order of a few nanometers, i.e., less than 5. In contrast, the instantly claimed particles are on the order of 1000 – 10000 times larger, i.e., in the micron range, with several up to 100 microns in diameter, e.g., MFL-100 CA, has a particle diameter of 90 to 110 microns, paragraph 17.

Further, as known in the art, and as evidenced in two enclosures provided with the Amendment filed 13 May 2008, the density of fullerenes is 1.7 – 1.9 g/cc. This fact is shown on page 4 of the six page MSDS from the University of Notre Dame website (www.nd.edu) and on page 1 of a two-page product information sheet from chemicalland21.com. The density of the instantly claimed resin particles (0.02 to 0.65 g/cc) is far less than that of the cited fullerenes. Further, the particle size of the instantly claimed particles is on the order of 1000-10000 times greater than that of fullerenes.

In the Advisory Action of 17 March 2008, the Examiner broadly asserted that “[t]he Mellul reference contains acrylic, styrene and vinyl type resins.” Given that Mellul explicitly discloses fullerenes, “molecular fullerenes, [which are noted to] consist of completely closed hollow spheres of carbon atoms,” it would seem that if Mellul desired to disclose that the “acrylic, styrene and vinyl type resins” were hollow, then a specific disclosure of “hollow resins”

would be included. Mellul fails to include such a disclosure. Indeed, the passage apparently quoted by the Examiner reads "resins of the acrylic, styrene, acrylate/styrene and vinyl type may be mentioned in particular," column 7, lines 4-6. While Mellul discloses only that nail varnishes may contain such resins, it is not disclosed that the resins are hollow, and one skilled in the art reading such a passage would not conclude that they are hollow.

Clearly, Mellul cannot be said to disclose a cosmetic including the same type of particles as instantly claimed. Applicants respectfully submit that claim 1 and all claims depending therefrom (3 and 5-8) are patentable, and request the withdrawal of the rejection.

Applicants hereby explicitly request that the Examiner clearly and directly address the differences (including density and particle size) between the fullerenes of Mellul and the hollow resin powders of the instant invention. It is noted again for the record, that because fullerenes contain only carbon atoms, they are not considered "organic," just as graphite and diamond, each of which contains only carbon atoms, are not considered organic.

Claim Rejections - 35 U.S.C. §103(a)

The Examiner rejected claims 10-12 under 35 U.S.C. 103(a) as obvious in view of Mellul. The Examiner essentially contends that the nature of the hollow powders is immaterial, and that resin or inorganic hollow powders are obvious variants of the hollow fullerene particles disclosed in Mellul.

The Examiner will note that claims 10-12 have been canceled thus rendering the rejection thereof moot.

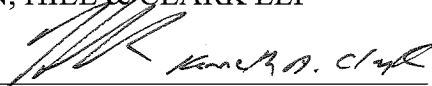
CONCLUSION

In light of the foregoing, Applicants respectfully request that the amendment be entered into the record and considered. Applicants respectfully submit that the present application, including claims 1, 3 and 5-8, is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge the same to our Deposit Account No. 18-0160, our Order No. IWI-16232.

Respectfully submitted,

RANKIN, HILL & CLARK LLP



Kenneth A. Clark
Reg. No. 32,119
Christopher J. Korff
Reg. No. 55,342

925 Euclid Avenue
Suite 700
Cleveland, Ohio 44115-1405
(216) 566-9700